

Title (en)
Wireless communication device and method

Title (de)
Anordnung und Verfahren zur drahtlosen Kommunikation

Title (fr)
Dispositif et procédé de communication sans fil

Publication
EP 1555763 A1 20050720 (EN)

Application
EP 05009051 A 20000602

Priority
• EP 00936466 A 20000602
• US 32451599 A 19990603

Abstract (en)
A wireless communication device of a cellular telephone network including a searcher (10). Pilot signals from nearby base stations are correlated with a pseudonoise sequence inside a search window, using a bank of correlators (20). Each correlator (20) is assigned a different delay, from among a sequence of delays in the window (14). At each delay, correlation is performed initially for a first dwell time. If the resulting correlation value exceeds a threshold, the correlation is continued for a second dwell time. Otherwise, the correlator (20) is set to the next delay in the sequence. Only the outputs of second dwell correlations are used to identify the nearest base station. Some correlations may perform first dwell correlations at new delays in the same time that other correlators are still performing second dwell correlations at old delays in the window. <IMAGE>

IPC 1-7
H04B 1/707

IPC 8 full level
H04B 1/707 (2011.01); **H04B 1/7075** (2011.01); **H04B 1/7077** (2011.01); **H04B 1/708** (2011.01); **H04B 1/709** (2011.01)

CPC (source: EP US)
H04B 1/70756 (2013.01 - EP US); **H04B 1/70775** (2013.01 - EP US); **H04B 1/708** (2013.01 - EP US); **H04B 1/709** (2013.01 - EP US); **H04B 2201/70701** (2013.01 - EP US); **H04B 2201/70702** (2013.01 - EP US); **H04B 2201/70707** (2013.01 - EP US)

Citation (search report)
• [YX] US 5222100 A 19930622 - LUNDQUIST ALAN E [US], et al
• [Y] US 5216693 A 19930601 - NAKAMURA MASARU [JP]

Designated contracting state (EPC)
DE FR GB NL

DOCDB simple family (publication)
WO 0076164 A1 20001214; AT E312437 T1 20051215; AU 5178100 A 20001228; BR 0006175 A 20010417; CN 1260933 C 20060621; CN 1310904 A 20010829; DE 60024570 D1 20060112; DE 60024570 T2 20060614; DE 60045265 D1 20101230; EP 1103126 A1 20010530; EP 1103126 A4 20040616; EP 1103126 B1 20051207; EP 1555763 A1 20050720; EP 1555763 B1 20101117; US 6307878 B1 20011023; US RE39540 E 20070403

DOCDB simple family (application)
US 0015223 W 20000602; AT 00936466 T 20000602; AU 5178100 A 20000602; BR 0006175 A 20000602; CN 00801025 A 20000602; DE 60024570 T 20000602; DE 60045265 T 20000602; EP 00936466 A 20000602; EP 05009051 A 20000602; US 32451599 A 19990603; US 69143203 A 20031023